

SHIP SYSTEM Ventilation	SUBSYSTEM	MRC CODE R-	
SYSTEM	EQUIPMENT Ventilation Systems	RATES GS-11/12	M/H 40.0
MAINTENANCE REQUIREMENT DESCRIPTION 1. Conduct SNAPSHOT inspection procedure for ship's ventilation system.		TOTAL M/H 40.0 ELAPSED TIME	
SAFETY PRECAUTIONS 1. Forces afloat comply with NAVOSH Program Manual for Forces Afloat, OPNAVINST 5100.19 series. 2. Ensure all tag-out procedures are in accordance with current shipboard instructions. 3. Consider all electrical leads to be energized until positively proven they are de-energized. 4. Never attempt to clean grease interceptor hood while fan motor is energized. 5. Avoid repeated/prolonged skin contact with hazardous materials. Wash affected areas with <u>soap and water</u> upon completion of task or prior to eating, drinking, smoking, or applying cosmetics. 6. Ensure fan blades are completely stopped before attempting this inspection. If necessary, once fan rotation has stopped, place a wood pole between blades to prevent further rotation.			
TOOLS, PARTS, MATERIALS, TEST EQUIPMENT			
TEST EQUIPMENT 1. [3087] Multimeter, AC/DC, 20K/VDC, SCAT-4245, Simpson 260/6XLP MATERIALS 1. [0307] Container (all types), No NSN -- W/C provide 2. [0365] Detergent, general purpose, P-D-1747 Hazardous Material User's Guide (HMUG) Group 7, Disposal Method 3 3. [1102] Rags, wiping 4. [1144] Tag, safety 5. [2610] Brush, plater's, hand		TOOLS 1. [1170] Mirror, inspection 2. [1172] Screwdriver, cross tip, 4", # 2 phillips, nonspark/nonmag 3. [1451] Wrench set, socket, 1/4" sq drive, 3/16" to 1/2", 13 PC 4. [2271] Flashlight, Type 3, style 1, explosive proof 5. [3886] Screwdriver, flat tip, 6" MISCELLANEOUS 1. [0525] Gloves, chemical protective, Natural/syn rubber, size 10	PAGE 1 OF 8 87 AAAA N
DISTRIBUTION STATEMENT D Distribution authorized to DOD components and DOD contractors only; critical technology; August 1997. Other requests for this document shall be referred to Naval Sea Systems Command (SEA 04TD). Destroy by any method that will prevent disclosure of contents or reconstruction of the document.			
LOCATION		DATE August 1997	N

HAZARDOUS MATERIALS CONTROL STATEMENT (U) The Hazardous Material Users Guide (HMUG), OPNAV P-45-110-91, provides additional control measures, precautions, personal protective equipment (PPE), and spill controls for the hazardous material(s) identified in the Tools, Parts, Materials, Test Equipment block.													
TOOLS, PARTS, MATERIALS, TEST EQUIPMENT (Contd) MISCELLANEOUS (Contd) <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> 2. [3215] Respirator, air filtering, Disposable mask, 20 EA 3. [3500] Cleaner, vacuum, electric, Floor mod, vert tank, wet or dry pick-up </td> <td style="width: 50%; vertical-align: top;"> 4. [3707] Goggles, industrial </td> </tr> </table> <p>NOTE: Numbers in brackets can be referenced to Standard PMS Materials Identification Guide (SPMIG) for stock number identification.</p>		2. [3215] Respirator, air filtering, Disposable mask, 20 EA 3. [3500] Cleaner, vacuum, electric, Floor mod, vert tank, wet or dry pick-up	4. [3707] Goggles, industrial										
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PROCEDURE <p>NOTE 1: Accomplish inspection before availability, after availability, and before deployment.</p> <p>NOTE 2: Number of man-hours assigned is average for DD-class ships and may require adjustment for larger class of ships.</p> <p>NOTE 3: Upon completion of inspections, fill out Summary Sheet and return to Code 923.</p> <p>NOTE 4: Visually inspect the ships Ventilation System to include but no limited to Sick Bay and Isolation Wards for cleanliness, proper support, (includes Sound Isolation Devices), rust and corrosion, components installed (includes Gages and Label Plates), damage and deterioration, (includes Lagging), missing parts, tightness of bolts and casings/joints/seal to determine material condition. Include (as applicable):</p> <table style="width: 100%; border: none;"> <tr> <td>Ducts and Plenums</td> <td>Insulation</td> </tr> <tr> <td>Supports</td> <td>Filters and Screens</td> </tr> <tr> <td>Floats and Diffusers</td> <td>Dehumidifiers</td> </tr> <tr> <td>Dehydrators</td> <td>Hoods and Fans</td> </tr> <tr> <td>Wire Mesh Screens</td> <td>Cooling Coils</td> </tr> <tr> <td>Flanges and Shutters</td> <td>Flame Arrestors</td> </tr> </table> <p>NOTE 5: This inspection does not include:</p> <ol style="list-style-type: none"> a. Air Conditioning Plants (51422) b. Lagging (50811) (50812) c. Power Cable (32111) <p>1. Conduct SNAPSHOT Inspection Procedure for Ship's Ventilation System.</p> <ol style="list-style-type: none"> a. Inspect ventilation supply and exhaust ducting, and plenum interior. <ol style="list-style-type: none"> (1) Remove access plates. (2) Inspect interior of ducting and plenums for dirt accumulation, rust and cracks. 		Ducts and Plenums	Insulation	Supports	Filters and Screens	Floats and Diffusers	Dehumidifiers	Dehydrators	Hoods and Fans	Wire Mesh Screens	Cooling Coils	Flanges and Shutters	Flame Arrestors
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PROCEDURE (Contd)	
(3) Reinstall access plates.	
b. Inspect wire mesh screens.	
(1) Visually inspect screens for signs of deterioration, damage, or missing sections.	
c. Inspect insulation.	
(1) Visually inspect insulation for signs of deterioration, damage, or missing sections.	
d. Inspect ducting supports.	
(1) Visually inspect ducting supports for deterioration, rust, damage or missing parts.	
(2) Ensure support hardware is intact and there are no missing parts.	
e. Inspect ducting flanges/shutters.	
(1) Visually inspect duct flanges and shutters for rust, damage, missing or loose hardware. Inspect shutters for binding, bent or missing parts.	
(2) Visually inspect flange gaskets for deterioration or signs of leakage.	
f. Inspect filters/screens/floats/diffuser/flame arrestors.	
(1) Visually inspect filters and screens for cleanliness, signs of deterioration, and restricted air flow.	
(2) Inspect gasket in filter access cover, if applicable, for signs of deterioration.	
(3) Inspect floats for corrosion, pin holes, and foreign matter.	
(4) Inspect diffusers and flame arrestors for corrosion and foreign matter.	
g. Inspect dehumidifiers/dehydrators/cooling coils.	
(1) Visually inspect dehumidifiers, dehydrators, and cooling coils for signs of leakage, clogged drains, missing parts, rust and deterioration, corrosion, and foreign matter.	
(2) Inspect stainers and filters for clogging and deterioration.	
(3) Inspect gages for damage and current calibration status.	
(4) Visually inspect associated piping for signs of leakage, deterioration, rust and proper support.	
h. Inspect grease interceptor hood.	
NOTE 6: Ships Force to provide personnel to drain, disconnect, and clean detergent line and foot valve in detergent tank in preparation for inspection.	
WARNING: Never attempt to clean grease interceptor hood while fan motor is energized.	
WARNING: Avoid repeated/prolonged skin contact with hazardous materials. Wash affected areas with <u>soap and water</u> upon completion of task or prior to eating, drinking, smoking, or applying cosmetics.	
(1) Inspect grease interceptor hood detergent tank.	
(a) Drain detergent tank.	
(b) Disconnect detergent line from pump.	
(c) Remove detergent line and foot valve from detergent tank.	
(d) Clean detergent tank; inspect tank for cracks and interior for foreign matter.	

PROCEDURE (Contd)	
(2) Inspect grease interceptor hood foot valve. (a) Remove foot valve from detergent line. (b) Disassemble foot valve. (c) Inspect screen for breaks and clogged perforations. (d) Reassemble foot valve. (e) Reinstall foot valve on detergent line. (f) Reinstall foot valve and detergent line on detergent tank. (g) Inspect all connections for tightness. (h) Fill detergent tank with detergent mixed to manufacturer's specifications. (i) Remove safety tag. (j) Return equipment to readiness condition. i. Inspect ventilation fan.	
NOTE 7: Ships Force to provide personnel, as required, to clean interior of ventilation fans in preparation for inspection.	
CAUTION: Prior to de-energizing equipment serving electronic space that would be adversely affected by a temporary temperature increase caused by a lack of ventilation, make proper notification.	
WARNING: Consider all electrical leads to be energized until positively proven they are de-energized.	
WARNING: Ensure all tag-out procedures are in accordance with current shipboard instructions.	
(1) De-energize vent motor and controller and tag "Out of Service."	
NOTE 8: If access at inlet to fan is not installed, have access installed.	
(2) Remove fan access cover at fan or immediate ducting as applicable to gain access for inspecting fan.	
NOTE 9: In some spaces, it may be necessary to close all hatches and doors to prevent fan rotation.	
WARNING: Ensure fan blades are completely stopped before attempting to perform inspections. If necessary, once fan rotation has stopped, place a wood pole between blades to prevent further rotation.	
(3) Clean interior of housing using a vacuum cleaner and brush as required.	
(4) Where required, remove accumulated grease and dirt with rags and detergent solution.	
(5) Inspect interior of housing for rust, cracks, scraped areas, etc.	
(6) Clean impeller blades using brush or rags saturated with detergent solution, as required. Where necessary, rotate impeller to provide access to blades.	
(7) Inspect blades for cracks, pitting, dents, or any scraping damage.	

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PROCEDURE (Contd)

- (8) Reinstall fan section access cover or ducting as applicable.
- (9) Remove safety tag and return equipment to readiness condition.

2. Upon completion of inspection, record all results on data sheets and forward to SUPSHIP Portsmouth Code 923 for retention and analysis.

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PROCEDURE (Contd)

SHIP: DATE: TITLE: VENTILATION SYSTEM INSPECTOR: SWLIN: 51211 SAMPLE

COMPARTMENT	LOCATION	VENT SYSTEM #	SAT/UNSAT	DISCREPANCY/REPAIR SUMMARY
Crew Living Space	3-135-2-L	S3-140-2	UNSAT	Supply duct at forward bulkhead is missing 2' of fiberglass insulation

SHIP:DATE:INSPECTOR:

TITLE: VENTILATION SYSTEM

SWLIN: 51211

COMPARTMENT	LOCATION	VENT SYSTEM #	SAT/UNSAT	DISCREPANCY/REPAIR SUMMARY

PROCEDURE (Contd)

**DISPOSAL METHODS FOR HAZARDOUS MATERIAL/WASTE IDENTIFIED IN THE
TOOLS, PARTS, MATERIAL, AND TEST EQUIPMENT BLOCK**

Method 3: Discharge overboard outside of 12 nm of U.S. shore. Instructions on discharge in foreign water should be requested from Shipboard Hazardous Waste Coordinator. If material is an acid or alkali, follow neutralization instructions in Naval Ships' Technical Manual (NSTM) S9086-T8-STM-010/CH-593, Pollution Control. Store packaging and containers for reuse or dispose as solid waste, in accordance with NSTM, Chapter 593.

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